

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017451**Date Inspected:** 13-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Welding of East Line Ventilation Access Hole Insert (SMAW)
- 2). OBG Field Welding of East Line Ventilation Access Hole Insert (Fit-up & Tack)
- 3). OBG Field Splice 4W/5W Weld D1 & D2, Face A (QAI Verification)
- 4). OBG Field Splice 5W/6W Weld C1 & C2, Face A (QAI Verification)
- 5). OBG Field Splice 5W/6W Weld E1 & E2, Face A (QAI Verification)
- 6). OBG Field Splice of Lifting Rod Penetration Insert Welds, Face A (QAI Verification)

- 1). OBG Field Welding of East Line Ventilation Access Hole Insert (SMAW)

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing root and fill pass welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position from the A face in the deck plate on the Bike Path side between PP17 and PP18. The weld at this location is identified as 2E PP17.5 E2SE. The QAI periodically observed QC Inspector Pat Swain was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev.1. See photo below. Welding was in process for the duration of the QA Inspectors shift and the QA Inspector observed that the work appeared to be in general compliance with contract documents.

- 2). OBG Field Welding of East Line Ventilation Access Hole Insert (Fit-up & Tack)

The QAI periodically observed AB/F approved welder Hua Qiang Hwang (ID 2930) performing fit-up and tack

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welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position from the A face in the deck plate on the Bike Path side between PP23 and PP24. The weld at this location is identified as 3E PP23.5 E2S. The QAI periodically observed QC Inspector Pat Swain was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev.1. See photo below. Tack welding was completed and the QAI did not observe back welding being performed on the QA Inspectors shift. The QA Inspector observed that the work appeared to be in general compliance with contract documents.

### 3). OBG Field Splice 4W/5W Weld D1 & D2, Face A (QAI Verification)

The QAI performed verification Visual Testing (VT) and Ultrasonic Testing (UT) of 12% of the lengths of OBG Field Splice 4W/5W Weld ID: D1 & D2. The 4W/5W Weld ID: D1 & D2 verified by the QAI appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.

### 4). OBG Field Splice 5W/6W Weld C1 & C2, Face A (QAI Verification)

The QAI performed verification Visual Testing (VT) and Ultrasonic Testing (UT) of 12% of the lengths of OBG Field Splice 5W/6W Weld ID: C1 & C2. The 5W/6W Weld ID: C1 & C2 verified by the QAI appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.

### 5). OBG Field Splice 5W/6W Weld E1 & E2, Face A (QAI Verification)

The QAI performed verification Visual Testing (VT) and Ultrasonic Testing (UT) of 15% of the lengths of OBG Field Splice 5W/6W Weld ID: E1 & E2. The 5W/6W Weld ID: E1 & E2 verified by the QAI appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.

### 6). OBG Field Splice of Lifting Rod Penetration Insert Welds, Face A (QAI Verification)

The QAI performed verification Visual Testing (VT) and Ultrasonic Testing (UT) of 25% of the lengths (circumference) of OBG Field Splice of Lifting Rod Penetration Insert Welds at the following locations: 1E PP8.5 E3 Welds 1-4 and 1E PP9.5 E3 Welds 2-4. The East Line Insert Welds 1E PP8.5 E3 Welds 1-4 and 1E PP9.5 E3 Welds 2-4 verified by the QAI appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.



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### Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Madison,Bert	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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